ABSTRACT

INFLUENCE OF pH AND TEMPERATURE TO FIBRINOLYTIC ACTIVITY FROM PRODUCT FERMENTATION *Bacillus subtilis* ATCC 6633

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Fibrinolytic enzyme was found in some microorganisms, including *Bacillus subtilis.* Fibrinolytic enzyme activity of *Bacillus subtilis* was influenced by several factors, such as substrate concentration, pH, temperature, inhibitors, and activator. This research had been done for determined influence pH and temperature against fibrinolytic activity in molasses. Molasses contain sugar 62% of total sugar, so it has enough potential for microbial growth. Activity measured in unit per milliliter tyrosine per minute. Crude enzymes were taking after 30 hours incubation. The enzyme activity assay was observed at pH 5,0-9,0 and 20-60°C. The optimum fibrinolytic actitivity (0,3897 Unit.mL^{-1}.$minute^{-1}$) was obtained at 28°C and pH 6,0 in 0,1% molasses medium.

Keyword: *Bacillus subtilis*, fibrinolytic enzyme, fibrinolytic activity, molasse.